

1

SEQUENZPROTOKOLL

<110> Keller Dr., Ullrich

<120> Verfahren zur Veraenderung von Peptidsynthetasen in der Weise, dass sie ihre Substrataminosaeuren N-methylieren koennen

<130> KeActinoPat1

<140> PCT/DE00/01950

<141> 2000-06-15

<150> DE-19928313.3-41

<151> 1999-06-16

<160> 1

<170> PatentIn Ver. 2.1

<210> 1

<211> 3849

<212> DNA

<213> Streptomyces chrysomallus

<220>

<221> misc_feature

<222> (1)..(3849)

<400> 1

ggatccacct gctcgacacc gccaccgccc aacccgagca gcccctcagc cgcacgcgacg 60
tcctcaccctt ggaggagagg aaccgcacga tcgtcgaggt caaccggacc gaactgccgc 120
tgcccgacgc ctggttggtg gagctgttcg aacaacaggt gacctcaca cccgacgccc 180
ccgcccgtgt cagcgacggc gccacgtcga gctactcga gctcaacag cgcgccaacc 240
acctcgccca ccagctcacc acccggggca tccgccccgg cgacgcccgc gccgtccctc 300
tccaacgctc ccccgacacc gtcaccaaccg tcctcgccct cgccaagacc ggcgcgacct 360
acatccccct cgacagccgc taccgcgccc accgctaccg cctcgctcct gacgagacct 420
gcaccaaact cctcatcacc gaccacacca ccgacctga caccaccaca acccagttca 480
accccgccga cacccccac gacggcgaag acccgggcaa cccgaaccac accaccacc 540
ccgacgacgc cgctacatc atgtacacca gcggtccac cgcccgcccc agggcgctca 600
tcgccaccca ccgcaacatc accgcccctg ccctcgaccc ccgcttcgac ccacccgccc 660
accgcccgtg cctcctccac tccccaccg ccttcgacgc ctccacctac gagatctggg 720
tccccctcct caacggcaac accgtcgctc tcgccccac cgccgacctc gacgtccaca 780
cctaccacgg cgctcatcacc gaccagcaga tcaccgccct ctgggtgacc agctgggtct 840
tcaacctcct caccgagcag agcccgga ccttcaccg ggtccggcag atctggaccg 900
gcggcgaggc cgtctccggc gccaccgtca cccggttca gcaggcatgc cccgacacca 960
ccgtggtoga ccgctacggc cccaccgaga ccaccacctt cgccaccac caccctgctc 1020
ccacccccct caccggctcc gccgtcgctc ccacggccg ccccatggcc accatgcaca 1080
cctacgtgct cgacgacagc ctccagcccg tcgcccccg cgccaccggc gagctctacc 1140
tcgtgtggcag cggcctcgcc cgcggtacc tggaccgccc cgccctcacc gccgaacgt 1200
tcgtcgccaa cccgtacgcc gcaccggag aacgcatgta ccgcaccggc gacctggcac 1260
gctggaaccc cgacgaccac ctcgagtacg ccgcccggc cgaccaccag gtcaaggtcc 1320
gcggcttcgg catcgaaccc ggcgagatcg agaagctcct caccgacct ccccgctcg 1380
cccaggccgc cgtccacctc aaccgggacc agcccgga ccccggtc gtcgctacg 1440
tcgtcgcgga cacctcgggc ccgagcagcg atgtggacca gcagcaccag atcggcgagt 1500
ggcaggacct ctacgaactc ctctacgcgg cccccacggc cgagttcggc gaggacttct 1560
ccggttgaa cagcagctac gacggccggc cgatccccct cgaccagatg cgggagtggc 1620
gcgacgccac cgtggaacgc atccggggc tcaaccggc cgggtgctg gagatcggcg 1680
tcggcacggg cctgctgctc gcgaagctgg ccccgagtg cgaggagtac tggggacgg 1740
acctctcgcc caccgtgatc gaggcgtct cccggcacgt cgacgccgac ccggagctgg 1800
cccgccgggt caccctcgcg gccggtgccc cgacagagca cgaggggctg cccgtcgggc 1860
acttcgacac cgtcgtgctc aactccgtgg tccagtactt cccgaacgcc gactacctcg 1920
cccagggtcat cgagcaggcg ctgcggctgc tggcccccg cgccgcccgtg ttcacggcg 1980

2

acatccgcaa cccgcggctg ctgcgcacct tcaccaccgc cgtccagacc gcccgcgcgg 2040
aggaccggc cgacaccgcc gccgtgcggc ggcgcgtcga gcagagcctg gtgctggaga 2100
aggaaactcct ggtcgacccg gagtacttca ccgcgtcac ccaccgcctc ccggacctcg 2160
ccggcgctcga cctgcggctc aagtgcggcg ccgcccacaa cgagttgacc cgctaccgct 2220
acgacaccac gctccacaag gccggaatca ccgcgtccc gctgtccgag gccgcggtcc 2280
tggcctggcc gcaggacgcc gaggcactcg ccggcacct ggccgaggcc cggccggagc 2340
ggctgcgcgt caccggcgcg cccaactccc ggatagccgc cgacctcgcg gccagcacg 2400
ccctggagtc cggcaccgcc ccggccgggc ccccgaccgg gccctacgcc acggagcagc 2460
cggacctcga ggcactccac cgcctcgggg aggaccacgg gtactggacg gccgtcacct 2520
ggtccgcca ccgccccgac accgtcgacc tcaccttctg ccggcgcggc ctgctcgacg 2580
gcgcggtccc ggtcggtacg tacgccccgg cggccgcggc cgaccggcg acgccgtca 2640
ccgccttcac caccaacccc gtgcggcagc ggggcaccgc cgcgctgctc accgcgctgc 2700
gcgaacacgc cgccgccaa ctgcccgaact acatgcggcc cgcgcaatc gtcccgtcg 2760
accgcctgcc gctcaccgcc aacggcaagc tcgaccgggc cgccctcccg gcactcgacc 2820
cggagcacgc ggacaccggc cgcgccccca ggacgcgcga ggagcaggtg gtctgcgagc 2880
tgttcgcgga ggtgctcggc cggccgctcg tcggtgtgga ccaggacttc ttcgacctcg 2940
gcgggcactc gctgctcgcc acccggtga tcgcccggct gcgcgcgcgc ttcggcggtg 3000
aactgggcct gcgcagcctc ttcgaggcgc cgacgccggg cgggatcgcc gcccggtg 3060
acctcgacga cccggacggc tcctacgagg tgggtgctgcc gctgcgcgcgc cagggcagca 3120
ggccgcgct gttctgcatc cacccegggt gcggcatcag ctggtcgtac agcccgctga 3180
tcaagcacct cggcccgag taccgctgt acggcatcca ggcgcgagc ctggcccgc 3240
cggagccgcg gccggagagc atcgaggaga tggcggtgga ctacgccgac cagatccagg 3300
gcgtgcagcc gcacggcccc taccacctgg ccggctggtc gtteggcggg ctgtgcgccc 3360
atgccttggc cgcggagtcc cagcggcgcg gcgagccggt ggcgctggtc gcggtgctcg 3420
atgtgatecc gaactggcag gggctcacc acgacgacgt cccggcccc gacgaccggg 3480
tgatgctgct gtaccacgtc ggcctggctg acgacggcag ccaccgcaac gaccgcgaag 3540
agctgacctt cgccagggcc cgcgagatcc tgcgcgcga gggcagtgtg ctgcgaacc 3600
tgaggaggga ccggctcacc acgatcacc agatctcggc caacaacacc catctgaccg 3660
tcgactacca gcccgggccc atcgacggcg acctgctgct gatcgccgc tcggaacagc 3720
aggaccggc ggtcaccgcc gatgcctggc ggccgtacgt ctgcggcgcg gtcgaggccc 3780
acgtggtgcc cggcgagcac ggctccatgc tgaccggcc cggcacctg gccgagatcg 3840
gccggatec 3849